INTERNATIONALSEARCHREPORT

International application No. PCT/JP 2004/009694

| A. CLAS | SSIFICATIONOFSUBJECTMATTER | | | | |
|---|---|--|-----------------------|--|--|
| Int.Cl' G05F 1/56 | | | | | |
| According to International Patent Classification (IPC) or to both national classification and IPC | | | | | |
| B. FIELDS SEARCHED | | | | | |
| Minimum documentation searched (classification system followed by classification symbols) | | | | | |
| | 05F 1/00-1/70, H01L 27/04 | • | | | |
| | | | | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Japanese Utility Model Gazette 1922-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2004, Japanese Registered Utility Model Gazette 1994-2004, Japanese Gazette Containing the Utility Model 1996-2004 | | | | | |
| Electronic da | ta base consulted during the international search (name o | f data base and, where practicable, search ter | rms used) | | |
| | | | | | |
| | | | | | |
| C. DOCU | MENTS CONSIDERED TO BE RELEVANT | | | | |
| Category* | Citation of document, with indication, where ap | propriate, of the relevant passages | Relevant to claim No. | | |
| x | TIG 5061771 3/5777 | • | | | |
| Y · | US 5861771 A(FUJITSU LTD.) 19.01.1999, line 65, colum | 2 4 42 14-2 35 | 1-3 | | |
| - | column 8, Fig 3-6 | u a to line 16, | 4-7 | | |
| | & JP 10-133754 A, [0017]-[| 0030] & FR 2755318 A | | | |
| ļ | & KR 264718 B | | | | |
| Y | JP 2002-270781 A/RTCOW COM | DANS TODAY | | | |
| _ | JP 2002-270781 A(RICOH COMPANY, LTD.) 4-7 20.09.2002, [0015]-[0051], Fig 1,9 | | | | |
| | (Family:none) | 3 -10 | | | |
| Y | ED 1120522 30/ | | | | |
| I | EP 1128532 A2(FUJITSU LTD. 29.08.2001, [0016]-[0018], | 6,7 | | | |
| | & JP 2001-236131 A & US 64 | | | | |
| | & US 2002/0093317 A1 & US | 2003/0168916 A1 | | | |
| | | • = = = = = = = = = = = = = = = = = = = | | | |
| | | | | | |
| | | | | | |
| | | , | | | |
| Further documents are listed in the continuation of Box C. See patent family annex. | | | | | |
| "A" document defining the general state of the art which is not considered to be of particular relevance. "T" later document published after the international filing date or priority date and not in conflict with the application but cited to | | | | | |
| "E" earlier application or patent but published an account of the invention | | | | | |
| national filling date "X" document of particular relevance; the claimed invention cannot | | | | | |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document which may throw doubts on priority claim(s) or which inventive step when the document is taken alone document of particular relevance; the claimed invention cannot | | | | | |
| "O" docume means | "O" document referring to an oral disclosure, use, exhibition or other | | | | |
| "P" document published prior to the international filing date but later "&" document member of the same patent family | | | | | |
| Date of the actual completion of the international search Date of mailing of the international search report | | | | | |
| 01.10.2004 | | 19.10.2004 | | | |
| Name and m | ailing address of the ISA/JP | Authorized officer | 377 222 | | |
| Japan Patent Office | | SAKURADA Masaki | 3V 2917 | | |
| 3-4-3, Kası | 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan Telephone No. +81-3-3581-1101, Byt. 3356 | | | | |

INTERNATIONALSEARCHREPORT

International application No.
PCT/JP2004/009694

| C (Continuat | tion). DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|--------------|---|----|-----------------------|
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | | Relevant to claim No. |
| Y | JP 2000-284843 A(FUJI ELECTRIC CO.,LTD.) 13.10.2000, [0076]-[0081], Fig 7 (Family:none) | | 7 |
| X Y | JP 5-61556 A(MATSUSHITA ELECTRIC IND.) 12.03.1993, [0002]-[0004], Fig 3 (Family:none) | | 8 9-11 |
| Y | US 5777517 A(TOSHIBA CORP.) 07.07.1998, line 1 to line 13, column 9, Fig 12A & JP 9-153745 A, [0046]-[0047] | | 9-11 |
| Y | US 2002/0163385 A1 (SEIKO EPSON CORP.) 07.11.2002, [0126] - [0136], Fig 7 & JP 2002-124835 A, [0109] - [0119] | | 11 |
| A | JP 2001-92544 A (TOSHIBA CORP., TOSHIBA MICROELECTRONIC CORP.) 06.04.2001, whole document (Family:none) | cs | 1-7 |
| A | JP 57-128053 A(HITACHI LTD.) 09.08.1982, whole document (Family:none) | - | 8-11 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |